

Translation

PATENT COOPERATION TREATY

PCT/EP2003/014215



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P610824/WO/1	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/014215	International filing date (day/month/year) 13 December 2003 (13.12.2003)	Priority date (day/month/year) 27 March 2003 (27.03.2003)
International Patent Classification (IPC) or national classification and IPC B64C 27/33		
Applicant EUROCOPTER DEUTSCHLAND GMBH		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet. <input type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of _____ sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 28 September 2004 (28.09.2004)	Date of completion of this report 31 May 2005 (31.05.2005)
Name and mailing address of the IPEA/EP Facsimile No.	Authorized officer Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/014215

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
 pages 1-9, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the claims:
 pages 1-15, as originally filed
 pages _____, as amended (together with any statement under Article 19
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☒ the drawings:
 pages 1/1, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
 pages _____, as originally filed
 pages _____, filed with the demand
 pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

- These elements were available or furnished to this Authority in the following language _____ which is:
- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 03/14215

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

Novelty (N)	Claims	2-15	YES
	Claims	1	NO
Inventive step (IS)	Claims	2-15	YES
	Claims	1	NO
Industrial applicability (IA)	Claims	1-15	YES
	Claims		NO

2. Citations and explanations

1. This report makes reference to the following document:

D1: US-A-5 358 381 (COVINGTON CECIL E ET AL)
25 October 1994

2. The present application does not meet the requirements of PCT Article 33 because the subject matter of **claim 1** is not novel within the meaning of PCT Article 33(2).

- 2.1 D1 (see figure 8; the references in parentheses are to this document) shows a torsional element (5) for a bearingless rotor (1), said element being principally made of fibrous composite material (see column 3, lines 1-2), said element having an essentially symmetrical, flattened cross section approximating to the outline of a horizontal, central section of a double cone.

Therefore, all the features of claim 1 are known from D1.

3. The combination of features contained in **dependent**

claim 2 is neither known from nor suggested by the available prior art. The reasons are:

- 3.1 D1, which represents the closest prior art (see figure 8), discloses all the features of claim 1 (see also paragraph 2.1 above).
- 3.2 The problem addressed by the present invention may therefore be considered that of providing a compact torsional element which possesses a high degree of resistance to swivelling and low torsional resistance and also possesses a high degree of torsional strength.
- 3.3 This problem is solved as follows. The cross section of the torsional element is formed by two similar groups of webs (S1-S6) laterally opposite each other, the webs (S1-S6) of each similar group (S1-S3 and S4-S6) radiating from a common thin root area (4), which forms a central segment of the cross section of the torsional element and from which the webs (S1-S6) of both groups extend, and being arranged one above the other and mutually separated by narrow intermediate fissures (6). Each web (S1-S6) increases in thickness towards the free lateral side edges of the torsional element (2).

The subject matter of claim 2 is therefore novel (PCT Article 33(2)) and involves an inventive step (PCT Article 33(3)).

4. The remaining claims (claims 3-15) would, if dependent on claim 2, thus likewise meet the PCT requirements for novelty and inventive step.

5. **Summary**

Claim 1 does not meet the requirements of PCT
Article 33(1).

Claims 2-15 apparently meet the requirements of PCT
Article 33(1).